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Comments of the California Hydrogen Business Council on Volkswagen California ZEV Investment Commitment

Prepared for: California Air Resources Board

December 16, 2016

The California Hydrogen Business Council (CHBC) strongly supports the planned Air Resources Board's (ARB's) process aimed at using the Volkswagen (VW) California Zero Emission Vehicle (ZEV) Investment Commitment in a way that maximizes adoption of ZEV's to advance California's leadership in environmental policy. The CHBC applauds ARB's strong encouragement for VW to include hydrogen infrastructure and outreach efforts in its consent-decree investment plans.

In particular, the CHBC encourages inclusion in the plans:

- The funding of public outreach efforts aimed at making the general public in California fully aware of, and comfortable with, hydrogen FCEV's, infrastructure and associated technologies
- Early expansion of the hydrogen refueling station network and supporting infrastructure
- Fuel cell powered transit applications
- Fuel cell powered goods movement and freight transport
- Hydrogen production that that enables primary renewable energy development, including multi-megawatt power-to-gas deployment
- Development of the above hydrogen infrastructure in ways that further the Green Cities Vision
- Deployment of hydrogen refueling stations that enable ZEV's for the 40% of Californians living in multi-family dwellings
- Support for large scale renewable hydrogen production facilities to enable cost-effective zero carbon fuel for FCEVs

CHBC believes strongly that ARB needs to assure that the settlement money is equitably used to fund a balanced portfolio of zero emission vehicles technologies. VW should not be allowed to direct most of the funding to Battery Electric technology. If allowed to do so, VW would be reaping an unintended benefit of having its settlement funds disproportionately reward the technology it is backing.

The CHBC is composed of over 100 companies, agencies and individuals involved in the business of hydrogen. Our mission is to advance the commercialization of hydrogen in the energy and transportation sectors, including passenger vehicles, goods movement, and stationary power systems to reduce emissions and dependence upon petroleum products. More information is at www.californiahydrogen.org.

The CHBC has been requested by its Board of Directors to follow the ARB VW ZEV Investment Plan process closely, and to provide help and encouragement in that process where possible.

Many CHBC members have or will be submitting project proposals to VW for their consideration. We have great expectation that these projects will well support ARB's current and long term goals and will meet ARB's guidelines for consideration in VW's investment plan.

The CHBC looks forward to working with the ARB and the Volkswagen Group as this process continues. Sincerely,

Jeffrey A. Serfass

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¹ The views expressed in these comments are those of the CHBC, and do not necessarily reflect the views of all of the individual CHBC member companies. Organizational members of the CHBC include AC Transit, Air Liquide Advanced Technologies U.S. LLC, American Honda Motor Co., Inc., Ballard Power Systems, Bay Area Air Quality Management District, Beijing SinoHytec, Bethlehem Hydrogen Inc, BMW of North America LLC, California Fuel Cell Partnership, CALSTART, Cambridge LCF Group, Center for Transportation and the Environment – CTE, China Hydrogen Fuel Cell Corporation, Coalition for Clean Air (CCA), Community Environmental Services, E4 Strategic Solutions, ElDorado National – California, Electro Power Systems, Energy Independence Now (EIN), First Element Fuel Inc, FuelCell Energy, Inc., General Motors Corporation, Giner, Inc., Gladstein, Neandross & Associates (GNA), Golden State EPC Inc, Greenlight Innovation, GTA, Inc., GTM Technologies Inc., H2B2, H2Safe, LLC, H2Tech Systems, Horizon Fuel Cells Americas, Inc., Hydrogen in Motion, Hydrogenics Corporation, Hydrogenious Technologies, HydrogenXT, Hyundai Motor Company & Kia Motors Corp, i-2-m, Idaho National Laboratory, Intelligent Energy, IRD Fuel Cells LLC, ITM Power Inc, Ivys Inc., Johnson Matthey Fuel Cells, Linde North America Inc, Longitude 122 West, Inc., Loop Energy Inc, McPhy Energy, MPL Consulting, Inc., National Renewable Energy Laboratory – NREL, Nel Hydrogen, Next Hydrogen Corporation, Nuvera Fuel Cells LLC, Pacific Gas and Electric Company - PG&E, Paramount Energy West LLC, PDC Machines, Inc., Plug Power, Inc., Port of Long Beach – POLB, PowerHouse Energy Americas, Powertech Labs, Inc., Proton OnSite, Ramco Consulting Company Inc, Rio Hondo College, Sacramento Municipal Utility District (SMUD), SAFCell Inc, Schatz Energy Research Center - SERC, South Coast Air Quality Management District (SCAQMD), Southern California Gas Company, Sumitomo Corporation of Americas, SunLine Transit Agency, Terrella Energy Systems Ltd, Toyota Motor North America Inc., UCI - APEP - Advanced Power and Energy Program -UC Irvine, United Hydrogen Group Inc, US Hybrid Corporation, WireTough Cylinders, LLC, Zero Carbon Energy Solutions, Ztek Corporation.